

## **Electrical / Environmental**

# **HM67**





## Surface Mount Common Mode Chokes

Operating Temperature Range

-40 °C to +125 °C

Ambient Temperature, Maximum

85°C

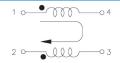
• Temperature Rise, Maximum

40°C

Dielectric Withstanding Voltage

300Vdc

**Schematic** 



Specifications							
Part Number	Terminals	Common Mode Inductance @ IOO kHz - O. I V (I-4 or 2-3) µH	Inductance Leakage @ IOO kHz - O. I Vrms (I-4) <sup>(I)</sup> Typ. μΗ	Rated Current mA	DCR $^{(2)}$ Max.	Marking Code	Figure
HM67-B5R0LF	1-4, 2-3	5.0 ±30%	0.08	1000	0.12	А	1
HM67-B110LF	1-4, 2-3	11.0 ±30%	0.10	500	0.15	В	1
HM67-S250LF	1-4, 2-3	25.0 ±30%	1.60	500	0.18	С	1
HM67-B510LF	1-4, 2-3	51.0 ±30%	1.90	500	0.10	D	1
HM67-S510LF	1-4, 2-3	51.0 ±30%	2.80	500	0.25	Е	1
HM67-B471LF	1-4, 2-3	470.0 ±30%	0.80	500	0.28	F	1
HM67-B102 <sup>(3)</sup> LF	1-4, 2-3	1000.0 +50%, -30%	0.16	500	0.30	G	1
HM67-B222 <sup>(3)</sup> LF	1-4, 2-3	2200.0 +50%, -30%	0.16	400	0.42	Н	1
HM67-B472 <sup>(3)</sup> LF	1-4, 2-3	4700.0 +50%, -30%	0.24	200	0.67	l	1
HM67-10510LF	1-4, 2-3	51.0 ±30% <sup>(4)</sup>	2.40 <sup>(4)</sup>	200	0.403	0510	2

Notes:

- (1) Leakage inductance is measured with pin 2 & 3 shorted.
- (2) DC resistance is measured at 25°C.
- (3) Maximum operating temperature is +85  $^{\circ}\text{C}.$
- (4) Common mode inductance & leakage inductance of HM67-10510LF are measured at 100 kHz, 0.05V

# **Packaging**

Standard: Embossed Tape & Reel

Reel: Diameter: Figure 1 & 2 = 13" (330.2mm)

Capacity: Figure 1 = 400 Units

Figure 2 = 2000 Units

#### **Ordering Information HM67** В 110 LF **TR13** TR - Tape & Reel Packing Model Series ■ 13 - 13" reel Winding Type: ■ B = Bifilar Lead-Free S /10= Sector Inductance Code: -First 2 digits are significant. Last digit denotes the number of trailing zeros. For values below 10µH, "R" denotes the decimal point.





Seating Plane

## **Outline Dimensions (Inch/mm)**

Figure 1

.004/0.10MAX

.155 3.9 Max.

Side View

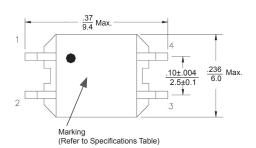
Figure 2

Bottom View

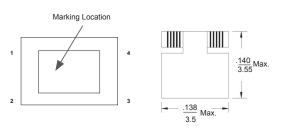
.024
0.60 Typ.

.138
3.50 Max.

**Top View** 

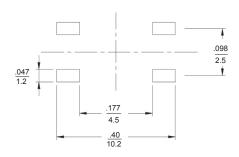


**Top View** 

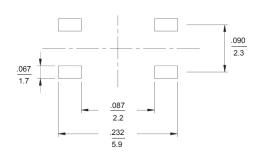


Side View

**Recommended Solder Pad Layout** 



#### Recommended Solder Pad Layout

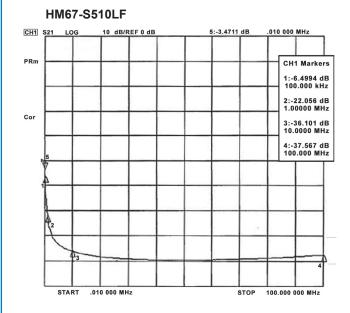


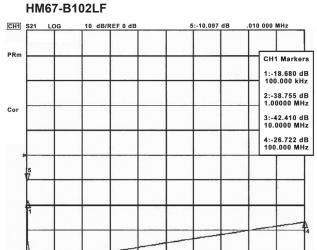


# Electrical Characteristies @ 25°C (A) Attenuation vs. Frequency Graphs HM67-B5R0LF HM67-S250LF CH1 S21 5 dB/REF -10 dB CH1 Markers CH1 Markers 1:-4.3297 dB 100.000 kHz 1:-5.4589 dB 100.000 kHz 2:-10.075 dB 1.00000 MHz 2:-17.657 dB 1.00000 MHz Cor 3:-19.095 dB 10.0000 MHz 3:-28.451 dB 10.0000 MHz 4:-29.918 dB 100.000 MHz START .010 000 MHz 100.000 000 MHz STOP HM67-B110LF HM67-B510LF 5 dB/REF 0 dB CH1 S21 LOG .010 000 MHz 5:-3.6395 dB PRm CH1 Markers CH1 Markers 1:-4.7546 dB 100.000 kHz 1:-7.2854 dB 100.000 kHz 2:-13.945 dB 1.00000 MHz 2:-18.650 dB 1.00000 MHz Cor Cor 3:-24.151 dB 10.0000 MHz 4:-18.761 dB 100.000 MHz 100.000 000 MHz

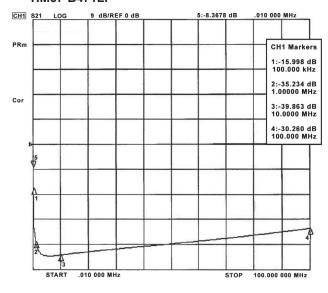


# Electrical Characteristies @ 25°C (Cont'd)

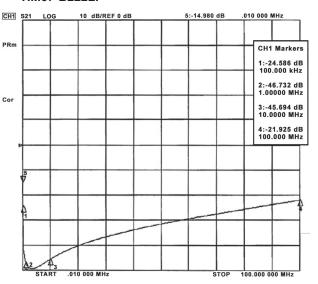




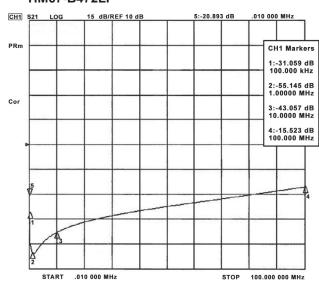
#### HM67-B471LF



#### HM67-B222LF



#### HM67-B472LF

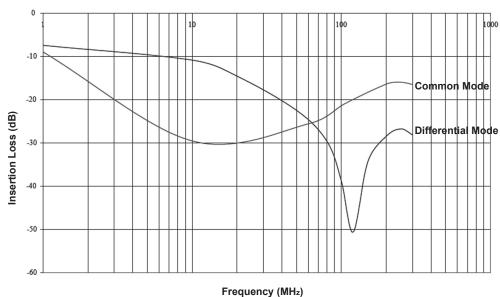




## Electrical Characteristies @ 25°C (Cont'd)

(B) Insertion Loss vs. Frequency Graph

# HM67-10510LF



(C) Current Derating Curve

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